





Testimony of

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on behalf of

Free Press Consumers Union Consumer Federation of America

before the

United States Senate Committee on Commerce, Science and Transportation

Regarding

Network Neutrality & The Communications, Consumer's Choice, and Broadband Deployment Act of 2006

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SUMMARY

Free Press¹, Consumers Union², and Consumer Federation of America³ appreciate the opportunity to testify on the Communications, Consumer's Choice, and Broadband Deployment Act of 2006. As consumer advocates, we strongly support policies that will bring more broadband competition to American households. However, we believe any legislation that reshapes critical elements of telecommunications law, such as video franchising and the Universal Service Fund, must necessarily reaffirm the commitment of the Congress to the principle of nondiscrimination on the Internet.

Meaningful, enforceable network neutrality provisions must be a central element in the Communications, Consumer's Choice, and Broadband Deployment Act of 2006. We strongly urge the adoption of The Internet Freedom Act, introduced by Senators Snowe and Dorgan, as part of S.2686. Without it, S. 2686 cannot deliver on its promise for more competition and enhanced broadband access.

Network neutrality protections have existed for the entire history of the Internet. Consumer advocates are not promoting new regulations. We are asking the Congress to preserve tried and tested consumer protections and network operating principles that have made the Internet the greatest engine of economic growth and democratic communication in modern memory.

Network neutrality must continue to be a central component of 21st century communications policy. This Committee faces a clear policy choice. At its base, this is a decision about who will control the Internet — consumers and producers in a competitive marketplace where innovators and entrepreneurs are rewarded by consumers, or network owners in a non-competitive, gatekeeper-controlled marketplace dominated by the cable-telephone duopoly who have both the incentive and now the ability to exclude competitors. The Internet has become a powerful economic and social force *because* long-standing principles of nondiscrimination have maintained the Internet as a neutral platform, protecting the free market and the democratic public sphere of online commerce and communication. To restructure communications law without restoring fundamental protections of network neutrality would stifle the tremendous economic growth and innovation that non-discrimination rules have fostered.

Network discrimination through a "tiered Internet" will severely curtail consumer choice. In the wake of flawed FCC rulings deregulating broadband in 2005, network owners have very publicly announced their intentions to scrap the neutral Internet and position themselves as gatekeepers of content, applications, and services. This has been and should remain the exclusive purview of consumers.

Consumers, not network operators, must be allowed to continue to choose winners and losers in the content and applications marketplace. Consumers can be offered a choice of different levels of network service, as they always have been, but then any content, application or service that can be delivered at the consumers chosen network service level should be allowed to without interference or additional charges imposed by the network operator. Without Network Neutrality, telephone and cable companies will have a strong financial incentive to distort the

free market in favor of their own content and services. This activity will stifle entrepreneurship and abolish "innovation without permission."

Absent network neutrality protections, consumers will experience higher costs and fewer choices for broadband. The higher costs of a "tiered Internet" levied on millions of online content providers will simply be passed on to consumers, directly or indirectly. There is no "free ride" on the network, and consumers will bear the costs of network development through higher access charges and higher prices for online goods and services. Moreover, a "tiered Internet" will further concentrate the market power of the cable modem and DSL duopoly, eliminating competition in the conduits and leaving consumers with no escape from content discrimination. Alternative approaches to broadband policy and infrastructure development are both more competitive and economically efficient. There exists no compelling economic reason to eliminate consumer choice with a "tiered Internet."

Consumer support for network neutrality represents an unprecedented level of public involvement in communications policy. Supporters of network neutrality represent a broad, nonpartisan coalition that joins both the right and left, and commercial and noncommercial interests. The campaign to preserve network neutrality protections is perhaps the most diverse set of public and private interests backing any single policy issue in Washington today. Hundreds of groups and hundreds of thousands of individuals from across the political spectrum are joining together to save this cornerstone principle of consumer choice and Internet freedom. For consumers, this debate should not be about whether we should have nondiscrimination in 21st century communications policy. This debate should be about how best to accomplish this essential and long-standing policy principle of nondiscrimination.

Network Neutrality protections have existed since the birth of the Internet.

Network neutrality boils down to the principle of *nondiscrimination*, which has been foundational in communications law for generations. It is a central reason why the Internet has proven to be the greatest engine of economic growth and democratic communication in modern memory. The development of the Internet and the online marketplace did not occur by accident. It happened with the help of sound public policies. Nondiscrimination and the structural separation of content and conduit in telecommunications networks were chiefly responsible for the dynamic growth of the Internet environment. The architects of the Internet were acutely aware of the centrality of regulatory protections that would guarantee standardized protocols and a neutral platform. The Internet's emerging promise in the mid-1990s as a platform for commerce, information sharing, and democratic cultural discourse were premised upon keeping the network open, nondiscriminatory, and operating as a pure free market. Nondiscrimination rules simply guarantee equal treatment for every online speaker—from large corporations to small businesses to citizen websites. Conceptually, it is the First Amendment for the Internet.

Tim Berners-Lee, the inventor of the World Wide Web, reflects:

"When seventeen years ago, I designed the Web, I did not have to ask anyone's permission...The Internet is increasingly becoming the dominant medium binding us. The neutral communications medium is essential to our society. It is the basis of a fair competitive market economy. It is the basis of democracy, by which a community should decide what to do. Let us protect the neutrality of the net."

Consumers take for granted that every Web site and application on the Internet is treated equally. That is largely because we have had fundamental protections in the law that guarantee nondiscrimination since the birth of the Internet. Nondiscrimination is a basic obligation of all network operators under Title II of the Communications Act. Almost 40 years ago, the Federal Communications Commission was confronted with the question of how to handle the transmission of data over the telephone network. In a series of proceedings beginning in 1968 known as the *Computer Inquiries*, the FCC decided that the companies providing communications services would not be allowed to interfere with or discriminate against information services. When the courts broke up Ma Bell in 1982, it required the Baby Bells to provide nondiscriminatory interconnection and access to their networks. These decisions to require the communications network to treat information services in a nondiscriminatory manner established one of the key building blocks of the Internet.

The idea is simple. Under the law, the physical wires over which data and information flow are treated differently than the data and information themselves. The number of physical networks to transmit data and information is very small and non-competitive (at best, most consumers have a choice of only cable or DSL). Public policy keeps the owners of these networks from using their monopoly (or duopoly) market power over the wires to discriminate against the information providers on their networks. If the network owners' non-competitive, discriminatory practices are held in check, the content market remains free and vigorously competitive. If they are not, it will be distorted. The separation of the physical communications layer from the content and applications layers is a cornerstone of telecommunications law. It established an "end-to-end" network, putting control of the Internet in the hands of the users at the edges.⁷

But in the summer of 2005, the FCC removed the cornerstone of non-discrimination. This decision was the culmination of several years of litigation. After years of bombardment by lobbyists and lawyers from the cable and telephone giants, the FCC first tried to take away nondiscrimination protections in 2002. The courts reversed them. But the cable companies and the FCC kept appealing, and eventually the Supreme Court heard the matter in July 2005. In the case of *NCTA v. Brand X*, the Court ruled simply that the FCC had the authority to make the decision, good or bad. It did not rule on the merits. As a result, last August, in the midst of the Internet revolution, the FCC handed total control over broadband networks to the telephone and cable companies to do as they please, removing broadband from the protections of Title II of the Communications Act. Among the many protections lost was the principle of nondiscrimination. It must not be allowed to lapse permanently.

In the months since then, cable and telephone network owners have openly declared that they intend to build a business model based on discrimination, extorting money from every online content and applications provider. This plan violates the fundamental principle of nondiscrimination that has been law for generations and which gave us the Internet. It would have been prohibited less than a year ago. And it threatens to end the Internet as we know it. The only barriers standing in the way of this scenario are temporary extensions of nondiscrimination protections resulting from a one year "sunset" period that applies to the FCC's August 2005 ruling and merger conditions applied to MCI-Verizon and SBC-AT&T.

Advocates of Network Neutrality are not promoting new regulations. We are preserving tried and tested consumer protections and network operating principles that ensure Internet freedom and which are responsible for the Internet as it exists today.

Network neutrality must be a central component of 21st century communications policy.

This Committee faces a clear policy choice with the treatment of network neutrality in the Communications, Consumer's Choice, and Broadband Deployment Act of 2006. At its base, this is a decision about who will control the Internet — consumers and producers in a competitive marketplace, or network owners in an anti-competitive marketplace. The destruction of nondiscrimination principles would mean fundamental, devastating changes to the Internet as we know it.

In our view, this cannot be a debate about whether we should have network neutrality. It is about what network neutrality protections will look like now that broadband is no longer governed under Title II of the Communications Act. This issue is fundamental to the legislation currently under consideration. The Communications, Consumer's Choice, and Broadband Deployment Act of 2006 is a broad reform of communications law. Major changes to video franchising and the Universal Service Fund are designed to transition the nation into the broadband era. This Committee recognizes that the Internet is the dominant communications medium in our society. But it has become dominant economically, socially, and politically *because* of the principles of nondiscrimination that have protected the free market and the democratic public sphere of online commerce and communication. To restructure communications law without including

fundamental protections of network neutrality would be to undermine the primary reason for our success.

The future of the Internet should be handled just like the birth of the Internet—by maximizing consumer choice. Unequivocally, consumer advocates have argued successfully for well over a decade that the baseline protection of network neutrality must be preserved to guarantee a free and competitive online marketplace. The genius of the Internet, the catalyst of economic growth, democratic discourse, and social opportunity it has become, is based on the foundation of nondiscrimination. The market has worked beautifully because the barriers to entry were low and the status of every actor in the marketplace remained equal. This is a competitive market at its finest, but it is premised on that neutral platform. Remove the neutral footing, and the market tips in favor of the network owners.

Network discrimination through a "tiered" Internet will severely curtail consumer choice.

The removal of network neutrality as a consumer protection will fundamentally change the Internet for the worse. Among the first casualties will be the free market for content, services and applications and the Internet's innovation engine.

Content Discrimination

When consumers log onto the Internet, they take for granted the ability to access content however and whenever they like. They assume the availability of any online feature they choose—watching online video, listening to podcasts, searching, emailing, and instant messaging. What they are assuming is the practical reality of nondiscrimination, or network neutrality. From the consumer perspective, network neutrality is the idea that the Internet should be open and free, unrestricted by anyone.

The network owners—cable and telephone companies—would like to charge extra tolls (beyond access charges that online content and service providers already pay) for smooth access to websites and sufficient speed to run applications and devices. The goal is the creation of a "tiered" Internet. The executives of these companies have repeatedly announced their intentions in the mainstream press, including the *Wall Street Journal* and the *Washington Post*.¹¹

The idea of a discriminatory or "tiered" Internet is based on a simple concept: the network owner intervenes between the consumer and the content provider to charge fees for delivery to the consumer. Under neutrality rules, the network owners charge the customer for communications services, and any application or content that works within that level of service must be allowed to flow — no questions (or additional fees) asked.

The network operators also charge content, applications, and service providers to send their wares through the network; but they must offer nondiscriminatory rates, terms and conditions to everyone. The network operator has nothing to say about the transaction between customers and the service providers once both have paid their fee to access the network. Consumers make their own choices, and application developers have a fair chance to win the customer without interference from the network operator.

Without network neutrality, the network operator has total control. Different fees can be charged based on the type of service (voice, video or data); different fees can be charged based on the type of provider (individual, small business or big business); different fees can be charged based on the affiliation of the provider with the network operator; different fees can be charged to guarantee delivery at a particular rate of speed or quality; different fees can be charged based on political affiliation or the day of the week. In fact, without neutrality rules, the network owners can charge whatever they want, to whomever they want, for any reason they choose.

They can create "fast lanes" and "slow lanes" and decide who gets to be in each. There is nothing to stop AT&T from pushing content providers into exclusive deals denied to Comcast or Time Warner subscribers. There is nothing to stop Verizon from slowing down Web sites they dislike and speeding up others with impunity. There is no reason why BellSouth could not make a deal with Amazon to make it the preferred online book retailer on its network. There is nothing to stop discrimination for social, economic or political reasons. This has been dubbed the "Tony Soprano" business model: Stand between content and consumers; demand a cut from strangers; let your friends go for free. Naturally, the network owners promise that they will commit none of the more egregious acts of extortion available to them. But they will not be prohibited by law from doing so.

Network neutrality keeps telephone companies off of consumers' backs and out of their wallets. Consumers should choose winners and losers in the content marketplace based on the merits of a Web site or service; network owners with strong financial incentive to distort the free market should be prevented from doing so.

Stifling Innovation

In the words of Internet architect Vint Cerf, the Internet is "innovation without permission." That is the genius of the network that has proven to be a wonderland for entrepreneurs. It is critical to remember that the Internet's name brands of today were just a good idea in a garage a decade ago. College kids created Google. A hobbyist conceived the idea for eBay. A teenager wrote the code for Instant Messaging. Some of the most popular sites on the Internet today — MySpace, FaceBook, and YouTube — did not exist three years ago. This technological revolution keeps turning because the Internet is an unrestricted free marketplace of ideas where innovators rise and fall on their merits.

The laws that protect this free market are network neutrality rules. Without the rules, innovators are at the mercy of the network owners to say who can and cannot succeed. We are back in the Tony Soprano model, where building a new online business requires paying protection money to the boss. Any entrepreneur that lacks the money to make a deal or the ability to draw the interest and privilege of a network operator is out of luck.

The repercussions of simply raising money from investors in a world without network neutrality will be devastating to innovators. How many venture capitalists will embrace a business plan if the first line reads: "Strike a favorable deal with AT&T"? That is simply a non-starter for entrepreneurs that will stifle innovation. The best ideas do not always come from the deepest pockets.

Or assume that a new business does beat the odds and gains a foothold in the online marketplace. What happens when it begins to compete with a service that is partially owned by the network operator? What happens when the fees for the fast lane are tripled? What happens when service is degraded at a prime time for business like the holiday shopping season? Will investors continue to sink money into a company with these kinds of market uncertainties?

Is this scenario hypothetical? Not at all. Hardware manufacturers currently advertise routers that have the ability to investigate the packets flowing onto a network to determine the origin of the content or application. If the content comes from a "preferred" provider that has made a deal with the network, it is guaranteed quality of service. ¹² If the content is from an unaffiliated source, the router can de-prioritize the content and degrade the service. Network operators are already planning to manage bandwidth to maximize revenue streams through discriminatory deals with third-party providers. This distorts the market, undermines competition, and smothers innovation.

Up to this point, the consumer has been the ultimate decision-maker on the network. The network owner simply transmitted data over wires, regardless of the source of that content. A "tiered" Internet installs the network owner as the gatekeeper of Internet content and applications. The result will be a cartel of super-fast websites that pay for the privilege of speedy consumer downloads, relegating the equal-opportunity Internet to the dustbin of history.

The Internet will begin to look more and more like cable TV. The owner of the network will pick content from a handful of other corporate media producers, and those will make up a limited menu of featured services with guaranteed quality. Everyone else will be a second-class citizen on the Internet. Instead of a thousand flowers blooming—including the independent voices that are now virtually absent from the mainstream media—we will have the channels that the network owners decide to deliver. Without network neutrality, we give network owners the power to become the gatekeepers of the Internet. This is terrifically bad news for the most democratic communications medium we've ever known.

Absent network neutrality protections, consumers will experience higher costs and fewer choices for broadband.

The network operators are fond of telling consumers that by stripping consumer protections like Network Neutrality, they will be saving money on their monthly bills. The notion is that the new discriminatory fees laid on Internet content and service providers for guaranteed delivery will subsidize some of the freight consumers once carried alone. They argue that consumers will pay the same (or less!) and get better service from the selected content providers that choose to buy their way into the fast lane.

Economics 101 suggests a different storyline. In reality, consumers will pay the tab, one way or another -- either by paying transparent monthly rates for access (with net neutrality left on the books) based on the level of service they demand, or through higher prices for consumer goods and Internet services (with net neutrality stripped out). Moreover, to the extent that the network operators are successful in undermining their competition, they will be able to raise prices.

Popular Internet content providers like Google, Amazon, Yahoo, and eBay are not going to simply swallow those extra costs levied on them by AT&T and Verizon. They will pass them along to consumers one way or another. Companies (like Google and Yahoo) that have built their franchise on free services supported by ad revenue will simply raise their advertising rates. Higher advertising rates will result in higher consumer prices on all the goods that advertise on these sites. Other companies (from Amazon to eBay vendors) who sell goods and services online will have to raise their rates to account for the extra charges. In other words, Amazon, eBay, and every small business that sells on the Web will have to charge more. I-Tunes and all the pay-per-download content sites will have to charge higher rates as well, just to send their cut to AT&T and Verizon. Content sites like YouTube, MySpace and video blogs may have to start charging for access to sustain their quality of service. Consumers are going to get hit in the wallet either way. But they're likely to do better in a transparent, competitive market with unlimited choices than by hoping AT&T, Verizon or Comcast will keep their promises.

Network discrimination is not necessary to promote the deployment of broadband networks

Network operators will build out their high-speed networks whether there are Network Neutrality rules or not. The cable companies have largely built out their networks already. One way or another, telephone companies will upgrade their copper wires to compete with cable. They would have done so even if they had lost the *Brand X* case and the nondiscrimination rules still existed. The only reason they are claiming they need discriminatory pricing is because they see an opportunity to extract monopoly rents from a new source.

There is no economic reason why nondiscrimination must be sacrificed to develop infrastructure. The pipe companies will generate the revenue to build networks in the same way they always have — from three sources. First, they will continue to receive billions of dollars every year from the monthly subscription fees paid by retail and enterprise consumers. Second, they will continue to receive billions of dollars every year from the access charges they receive from Internet content producers whose goods and services travel over their networks. (That's right — Internet companies already pay big bucks to be on the Internet. Any network operator who feels shortchanged can raise the rates, provided they do so a nondiscriminatory basis.) Finally, network operators will generate revenues by entering the content and applications market and competing for consumer dollars the old-fashioned way — earning them in the free market.

It is worth noting that the recent financial history of the large telephone companies suggests they have not been particularly serious about infrastructure investment. Since 2000, the annual reports of SBC and Verizon indicate that they have depreciated billions of dollars more than they have spent on their networks. ¹³ Instead, they have laid out capital to purchase other telephone companies — reducing competition and increasing market power. In effect, these companies have been *disinvesting* in their infrastructure. If they now project increases in infrastructure spending, that reflects the fact that they are working from years of deficit. AT&T, which is making the most noise about charging discriminatory fees, has the worst track record of investment, having taken \$9 billion more in depreciation expenses than it has laid out in capital expenditures in the past four years. ¹⁴

Approaching the situation through a slightly different lens, AT&T's path back to Ma Bell status involved the conglomeration of SBC, Ameritech, PacBell, SNET, and AT&T Wireless, at a cost of roughly \$140 billion. In the process, their market capitalization increased only \$40 billion. Ironically, the \$100 billion that disappeared is roughly what it would cost to run fiber to every American household.¹⁵

Now AT&T is lining up to spend another \$67 billion on BellSouth, while Verizon has a \$38 billion offer on the table to buy out its partner in Verizon Wireless. And yet they expect consumers to believe that they are short on capital and cannot afford to build their network without the elimination of consumer protection rules. Even in a world of Enron accounting, the idea that there is no revenue in the industry to upgrade the networks is a tall tale.

<u>Facilities-based competition is far too weak to protect consumers from anticompetitive, anti-consumer discrimination.</u>

The network owners have argued that Network Neutrality is an unnecessary protection because there is sufficient competition in the broadband market to deter bad behavior. Put simply, they argue that if Verizon degraded access to a site or created a discriminatory "fast lane" that consumers disliked — they would lose customers to the other network operators in the area.

But consumers must have robust competition and multiple choices for of broadband providers for this theory to work. ¹⁶ Such competition does not exist, and it isn't likely to exist in the foreseeable future. Most Americans have access, at best, to two broadband providers — cable and DSL. That's it. These two companies dominate over 98 percent of the broadband market. The share of the market held by all the other broadband technologies combined — satellite, fixed wireless, mobile wireless, and broadband over power lines — actually *decreased* over the last few years. ¹⁷

A significant chunk of the country has only one broadband provider, and around 10 percent of households have none at all. ¹⁸ This is hardly a competitive market. Certainly there is insufficient competition between different technologies to produce any kind of deterrent. If both the local cable and telephone companies are using their networks to discriminate, the consumer is trapped. There is nowhere to go. That's why nondiscrimination through Network Neutrality is so critical for the content and application layer of the Internet. Without Network Neutrality, the telephone and cable duopoly will leverage their market power over the network to gain control over the content and application markets, establishing a handful of wireline companies as the gatekeepers of the Internet.

Conclusions and Recommendations

Civic engagement on network neutrality represents the most diverse public response to a communications policy issues in recent history. A grassroots effort led by the "Save the Internet" Coalition (www.savetheinternet.com) includes nearly 700 organizations, from small community groups to large national organizations. Banded together in this coalition are the Gun Owners of America, Feminist Majority, Parents Television Council, American Library Association,

Consumers Union, and Educause. Network Neutrality is also supported by AARP, the ACLU, the Christian Coalition and the National Religious Broadcasters.

More than 700,000 individuals have signed a petition to Congress demanding Internet freedom through meaningful Network Neutrality. Thousands of bloggers of all political stripes and interests, from Daily Kos and Instapundit to video gamers, musicians and educators, have championed the issue and encouraged public involvement in the campaign. The world's most renowned experts on Internet technology, law, and policy have written prominently on the issue. This massive civic coalition stands next to a similarly large and unprecedented coalition in the commercial sector, joining together the Internet content and technology industries. Google, Amazon, Intel, Microsoft, eBay, are joined by hundreds of smaller online retailers and technology firms. The campaign to preserve Network Neutrality protections is perhaps the most diverse set of public and private interests backing any single issue in Washington today.

Recommendations

We urge the Committee to replace the current language in the Title X of the Communications, Consumer's Choice, and Broadband Deployment Act of 2006 with the provisions of The Internet Freedom Preservation Act, introduced by Senators Snowe and Dorgan. Merely directing the FCC to study the issue of network neutrality is insufficient to address this important policy priority. Once network operators begin to re-engineer the Internet to create a discriminatory system, it will be too late. The genie cannot return to the bottle. On the contrary, Congress must pass legislation that articulates a clear and enforceable affirmation of the principle of nondiscrimination. This will eliminate regulatory uncertainty and allow competition in the physical and applications layers of the Internet to resume a natural course. The consequences of inaction or half-measures will be severe.

We recommend against simply adopting the FCC's four vague "policy principles" — concepts that were never designed to be codified into regulation. The principles read as follows:

- Consumers are entitled to access the lawful Internet content of their choice.
- Consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement.
- Consumers are entitled to connect their choice of legal devices that do not harm the network
- Consumers are entitled to competition among network providers, application and service providers, and content providers. 19

That sounds good, but the interpretation and implementation of such vague concepts will be almost impossible. FCC Chairman Kevin Martin has already indicated publicly that he does not believe these principles prohibit a network owner from setting up "tiers" and creating fast and slow lanes of service.²⁰ These principles do not say anything about how and whether a network owner must disclose to its subscribers that discriminatory terms of service have been established on the network. And nowhere in the policy statement does the word "nondiscrimination" appear. Nondiscrimination is the core of Network Neutrality. Without it, the provision is toothless.

We strongly recommend adopting the legislation put forward by Senators Snowe and Dorgan. The Internet Freedom Preservation Act not only prevents broadband network owners from blocking and impairing consumer access to content, services and applications on the Internet, but also appropriately prohibits preferential pricing for access tiers — a poorly disguised form of discrimination. Importantly, the bill also creates a meaningful enforcement mechanism to deter network discrimination. It would ensure that telephone and cable companies are not allowed to transform the Internet from an open, innovative, competitive environment to one in which they control what consumers can buy, see, and use on the Internet.

The choice before the Committee is clear: allow consumers through an unfettered online marketplace to decide which businesses succeed or fail; or allow the dominant telephone and cable duopoly to use its marketplace power to exclude the entrepreneurs who offer consumers affordable and innovative communications products and services. We urge you to adopt the former direction. The future of the Internet, the health of the communications marketplace and the well-being of consumers depends on it.

¹ Free Press is a national, nonpartisan organization with over 225,000 members working to increase informed public participation in crucial media and communications policy debates.

² Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the state of New York to provide consumers with information, education and counsel about good, services, health and personal finance, and to initiate and cooperate with individual and group efforts to maintain and enhance the quality of life for consumers. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications and from noncommercial contributions, grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* with more than 5 million paid circulation, regularly, carries articles on health, product safety, marketplace economics and legislative, judicial and regulatory actions which affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.

³ The Consumer Federation of America is the nation's largest consumer advocacy group, composed of over 280 state and local affiliates representing consumer, senior, citizen, low-income, labor, farm, public power and cooperative organizations, with more than 50 million individual members.

⁴ Tim Berners-Lee "Neutrality of the Net", Decentralized Information Group, May 2, 2006.

⁵ See Earl Comstock and John W. Butler, "Access Denied" in Mark Cooper (Ed.), *Open Architecture as Communications Policy* (Stanford: Center For Internet and Society, 2004).

⁶ "Modification of Final Judgment," United States of America v. Western Electric Company and American Telephone and Telegraph Company, Civil Action No. 82-019, August 24, 1982.

⁷ See: 47 U.S.C. § 202; For a legislative, legal, and regulatory history, see: Steven Aronowitz, "*Brand X Internet Services vs FCC*: The Case of the Missing Policy Argument," *Berkeley Technology Law Journal*, Annual Review 2005; For a legal ruling consistent with nondiscrimination, see also: *AT&T v. City of Portland*, (9th Cir. 2000).

⁸ *Brand X v. FCC* (9th Cir. 2003).

⁹ "FCC Eliminates Mandated Sharing on Incumbents' Wireline Broadband Internet Access Services," Federal Communications Commission, August 5, 2005. See http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-260433A1.pdf

To See for examples: Expanding the Information Age for the 1990s: A Pragmatic Consumer Analysis (Consumer Federation of America and American Association of Retired Persons, January 11, 1990); Developing the Information Age in the 1990s: A Pragmatic Consumer View (Consumer Federation of America and Consumers Union, June 8, 1992); "Petition to Deny of Consumers Union, Consumer Federation of America, and Office of Communications, Inc. of the United Church of Christ," Federal Communications Commission, CS Docket No. 98-178, October 29, 1998; "Reply Comments of Center for Media Education, Office of Communications, Inc., United Church of Christ, Minority Media and Telecommunications Council, Civil Right Forum, and Consumer Federation of America, Federal Communications Commission, CC Docket No. 98-146, October 10, 1998.

¹¹ See for example: "At SBC, It's All About 'Scale and Scope'," BusinessWeek Online, November 7, 2005; Jonathan Krim, "Executive Wants to Charge for Web Speed," Washington Post, December 1, 2005; Dionne Searcey and Amy Schatz, "Phone Companies Set Off a Battle Over Internet Fees," January 6, 2006.

¹² These technologies and their implications are discussed in Mark Cooper, "Open Access to the Broadband Internet: Technical And Economic Discrimination In Closed, Proprietary Networks," *University of Colorado Law Review*, Vol. 69, Fall 2000.

¹³ Annual Reports of AT&T, Verizon and Bell South.

¹⁴ AT&T Annual Report, 2005, SBC Annual Report, various years.

¹⁵ "Broadband: Bringing Home the Bits", Committee on Broadband Last Mile Technology, Computer Science and Telecommunications Board, Division on Engineering and Physical Sciences, National Research Council, National Academy Press, Washington, D.C.

¹⁶ Trevor R. Roycroft, "Network Diversity—A Misguided Policy. A Response to Christopher S. Yoo's 'Promoting Broadband Through Network Diversity'" March 1 2006. Available at http://www.roycroftconsulting.org/response_to_Yoo.pdf

¹⁷ "High-Speed Services for Internet Access", Federal Communications Commission, Data from Form 477 Filings, April 2006.

¹⁸ "Broadband Deployment Is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas", United States Government Accountability Office, Report to Congressional Committees, GAO-06-426, May 2006. See also, "Presentation by Kevin J. Martin at the 22nd Annual Institute on Telecommunications Policy & Regulation," December 3, 2004.

¹⁹ "Appropriate Framework for Broadband Access to the Internet over Wireline Facilities", CC Docket No. 0233, Policy Statement, FCC 05-151, September 23, 2005.

²⁰ See Patrick Barnard, "Whitacre, Martin, Don't See a Need for Net Neutrality Legislation", TMCNet, March 24th 2006.